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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/516,648	12/01/2004	Dirk A.V. Picpers	BE 020013	1189

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PHILIPS INTELLECTUAL PROPERTY & STANDARDS  
P.O. BOX 3001  
BRIARCLIFF MANOR, NY 10510

EXAMINER
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PATEL, JAYESH A

ART UNIT	PAPER NUMBER
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2624

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	04/02/2007	PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

**Office Action Summary**

Application No.

10/516,648

Applicant(s)

PIEPERS, DIRK A.V.

Examiner

Jayesh A. Patel

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 01 December 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-9 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-9 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 01 December 2004 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date 12/01/2004.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_.

## **DETAILED ACTION**

### ***Drawings***

The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. The Method steps (Flowchart) of Claims 1-7 and the means and the display system of Claims 8-9 must be shown or the feature(s) canceled from the claim(s). No new matter should be entered. The drawings as presented by the applicant do not show the claimed elements are not instructed in English.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement-drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet"

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pursuant to 37 CFR 1.121(d). If the examiner does not accept the changes, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) and the Intellectual Property and High Technology Technical Amendments Act of 2002 do not apply when the reference is a U.S. patent resulting directly or indirectly from an international application filed before November 29, 2000. Therefore, the prior art date of the reference is determined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

Claims 1-9 are rejected under 35 U.S.C. 102(e) as being anticipated by Nieuwenhuizen (US 6611296) hereafter Nieuwenhuizen.

1. Regarding Claim 1, Nieuwenhuizen discloses an image processing method in **(Figs 1 and 2A)** comprising the steps of: providing an input image signal representing an input image **(Y, U, V)**, the input image signal indicating image characteristics of at least a color component **(U and V)**, detecting a region of an edge location in the input image at **(Col 1 Lines 16 –19 and 31-36)**, said edge location being located between regions of different image characteristics at **(Col 2 Lines 19 and 31)**, and processing the input image signal in the region of the edge location to provide an output image signal at **(Fig 1 Elements Y'' and U'V')**, the image characteristics of at least the color component being corrected by amplifying the color component at **(SATCOR)**.

2. Regarding Claim 2, Nieuwenhuizen discloses a method as claimed in claim 1, characterized in that the color component is amplified according to a parameter value, in particular wherein the parameter value is specifically adapted with regard to the color component at **(Col 2 Lines 19-31)**.

3. Regarding Claim 3, Nieuwenhuizen discloses a method as claimed in claim 1, characterized in that the color component is amplified depending on the signal value of the color component of the input image signal at **(Col 2 Lines 41-47)**. Compensation is needed for the chrominance signals U and V because a luminance value change will cause the saturation **(Color)** to change.

4. Regarding Claim 4, Nieuwenhuizen discloses a method as claimed in claim 1, characterized in that the color component is amplified depending on the signal value of the luminance component of the input image signal at **(Col 2 Lines 41-47)**. The input luminance signal  $Y$  and the histogram processed luminance signal  $Y'$  are used to control saturation (**color**) correction unit that processes chrominance signals  $U$  and  $V$  in to histogram processed chrominance signals  $U'$  and  $V'$ .

5. Regarding Claim 5, Nieuwenhuizen discloses a method as claimed in claim 1, characterized in that the color component is amplified depending on a difference signal value in **(Fig 2B Element Diff LUT)** determined from a non-corrected first image characteristic ( $Y$ ) of the input image signal and a corrected second image characteristics of the input image signal ( $Y'$ ), which has been corrected with regard to a luminance component at **(Col 2 Lines 59 and 60)**. The differences between image characteristic ( $Y$ ) of the input image signal and a corrected second image characteristics of the input image signal ( $Y'$ ) are stored in the Look up table.

6. Regarding Claim 6, Nieuwenhuizen discloses a method as claimed in claim 1, wherein a saturation level is increased in the region of the edge location at **(Col 2 Lines 41-52)**. Nieuwenhuizen discloses that for a local gain (increase) in the saturation due to the changes in the luminance between two points.

7. Regarding Claim 7, Nieuwenhuizen discloses a method as claimed in claim 6, wherein the correction of the color component in **(SATCOR)** is processed as a function of an original local saturation level **(UV)**, an original local luminance level **(Y)** or a local difference between an original and a peaked image signal at **(Col 2 Lines 41-47)**.

8. Regarding Claim 8, Nieuwenhuizen discloses an image processing device in **(Fig 1 and 2A)** comprising: means for providing an input image signal representing an input image **(Y, U and V)**, the input image signal indicating image characteristics of at least a color component **(U and V)**, means for detecting a region of an edge location in the input image and said edge location being located between regions of different image characteristics at **(Col 1 Lines 5-9 and 16-19)**, and means for processing the input image signal in the region of the edge location to provide an output image signal, the image characteristics of at least the color component being corrected by amplifying the color component at **(SATCOR)**.

9. Regarding Claim 9, Nieuwenhuizen discloses an image display system **(a display apparatus in Fig 1 and 2A, Col 1 Lines 5-8)** comprising: receiving means adapted to receive an input image signal for further processing, wherein the input image signal represents an input image **(Y, U and V)**, wherein the input

image signal indicates image characteristics of at least one color component (**U and V**), edge location signaling means for detecting a region of an edge location in the input image, wherein said edge location is located between regions of different image characteristics at (**Col 1 Lines 5-9 and 16-19**), filter means (**Fig 4,5 and Col 5 Lines 46 through Col 6 Lines 1-6**) for processing the input image signal at least in the region of the edge location, wherein the image characteristics of at least the color component are corrected by amplifying the color component at (**SATCOR**), and an image display device (**DD in Fig 1**) which is adapted to provide an output image signal derived at least from the input image signal, wherein the output image signal represents an output image.

### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jayesh A. Patel whose telephone number is 571-270-1227. The examiner can normally be reached on M-F 7.00am to 4.30 pm (5-4-9). If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jingge Wu can be reached on 571-272-7429. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public



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PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Jayesh Patel  
03/28/07

JP

  
JINGSE WU  
SUPERVISORY PATENT EXAMINER